## In the United States Patent and Trademark Office

Serial Number:

Appn. Filed: December 16, 2003

Applicant(s): Rajeev Sharma and Namsoon Jung

Appn. Title: A METHOD AND SYSTEM FOR IMMERSING FACE IMAGES INTO A

VIDEO SEQUENCE Examiner/GAU:

> Mailed: <u>December 16, 2003</u> At: <u>State College, PA</u>

## Information Disclosure Statement

Commissioner for Patents Washington, District of Columbia 20231

Sir:

Attached is a completed Form PTO/SB/08(A&B) and copies of the pertinent parts of the references cited thereon. Following are comments on any non-English-language references pursuant to Rule 98:

Very respectfully, Applicant(s):	Fsharma	•
	Jungnamsoon	

Enc.: PTO-1449 & References

c/o: Rajeev Sharma, Applicant Pro Se

Advanced Interfaces, Inc.

403 South Allen Street, Suite 104

State College, PA 16803

Telephone: (814)867-8977

Certificate of Mailing

I certify that this correspondence will be deposited with the United States Postal Service as first class mail with proper postage affixed in an envelope addressed to: "Commissioner for Patents, Washington, DC 20231" on the date below.

Date: 2003 , Applicant

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO	Co.	mplete if Known
	Application Number	
INFORMATION DISCLOSURE	Filing Date	December 16, 2003
	First Named Inventor	Rajeev Sharma
STATEMENT BY APPLICANT	Art Unit	
(Use as many sheets as necessary)	Examiner Name	
heet 1 of 3	Attorney Docket Number	AI-0017-YOU

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 4305131	Dec. 8,1991	Best	364/521
		<sup>US-</sup> 4569131	Feb. 11,1986	Falk	364-521
		<sup>US-</sup> 4975960	Dec. 4,1990	Petajan	381/43
		<sup>US-</sup> 5012522	Apr. 30,1991	Lambert	382/2
		<sup>US-</sup> 5715325	Feb. 3,1998	Bang et al.	382/118
		<sup>US-</sup> 5816823	Oct. 6,1998	Naimark et al.	434/307
		<sup>US-</sup> 5861906	Jan. 19,1999	Dunn et al.	348/7
		<sup>US-</sup> 5894320	Apr. 13,1999	Vancelette	348/7
		<sup>US-</sup> 6065042	May 16,2002	Reimer et al.	709/203
		<sup>US-</sup> 6184926	Feb. 6,2001	Khosravi et al.	348/239
		<sup>US-</sup> 6301370	Oct. 9,2001	Steffens et al.	382/103
		<sup>US-</sup> 6345293	Feb. 5,2002	Chaddha	709/219
		<sup>US-</sup> 6404900	Jun. 11,2002	Qian et al.	382/103
		<sup>US-</sup> 60/369279	Apr. 2,2002	Sharma	
		<sup>US-</sup> 60/399246	Jul. 29,2002	Sharma	
		US- 60/402817	Aug. 12,2002	Sharma	
		<sup>US-</sup> 60/409435	Sep. 10,2002	Sharma	
		<sup>US-</sup> 60/421717	Oct. 28,2002	Sharma	
		<sup>US-</sup> 2001/0056574 A1	Dec. 27,2001	Richards	725/36

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Г
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	7 ppiloditi of Oliod Boodillolik	Or Relevant Figures Appear	1
	_					
						E
	<u> </u>					
						Γ
						Г

Examiner		Date		
Signature		Considered		
	•	Considered		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO		Complete if Known		
		Application Number		
INFORMATION DISC	OCUDE	Filing Date	December 16, 2003	
		First Named Inventor	Rajeev Sharma	
STATEMENT BY API		Art Unit		
(Use as many sheets as nece	ssary)	Examiner Name		
Sheet 2 of 3		Attorney Docket Number	AI-0017-YOU	

			U. S. PATEN	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 2002/0100042 A1	Jul.25,2002	Khoo et al.	725/34
	<u> </u>	<sup>US-</sup> 2002/0108114 A1	Aug. 8,2002	Shinobara et al.	725/46
		US-			
		US-	<del> </del>		
		US-			
	-	US-			
		US-			
		US-			

		FORE	<b>IGN PATENT DOCU</b>	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Oiled Document	Or Relevant Figures Appear	Т
						L
						┝
						L

Examiner	 Date	-
Signature	Considered	
- 0	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁴Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO	C mplete if Known		
	Application Number		
INFORMATION DISCLOSURE	Filing Date	December 16, 2003	
STATEMENT BY APPLICANT	First Named Inventor	Rajeev Sharma	
(11	Art Unit		
(Use as many sheets as necessary)	Examiner Name		
Sheet 3 of 3	Attorney Docket Number	AI-0017-YOU	

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No. <sup>1</sup>	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		N.KRANSTOEVER, S.KETTEBEKOV, M.YEASIN, & R. SHARMA, "iMAP: A Real-Time Framework for Natural Multimodal Interaction with Large Screen Displays," Dept. of Comp. Science and Eng. Technical Report CSE-02-010, Pennsylvania State University, May 2002	
		E.OSUNA, R.FREUND, & F.GIROSI, "Training Support Vector Machines: An Application to Face Detection," Proc. IEEE Conf. Computer Vision and Pattern Recognition, pp. 130-136. 1997	
		C.RIDDER, O.MUNKELT, & H.KIRCHNER. Adaptive Background Estimation and Foreground Detection using Kalman-Filtering. In Proceedings of International Conference on recent Advances in Mechatronics, ICRAM 95, UNESCO Chair on Mechatronics, 193-199, 1995	
		H.ROWLEY, S.BALUJA, & T.KANADE, "Neural Network-Based Face Detection," IEEE Trans. Pattern Analysis and Machine Intelligence, vol.20, no.1, pp.23-38, Jan. 1998	
		R.SHARMA, V.I., PAVLOVIC', & T.S.HUANG. "Toward Multimodal Human-Computer Interface" Proceedings of the IEEE (Special issue on Multimedia Computing and Communication) 86(5): 853-869, May 1998	
		C.STAUFFER & W.E.L. GRIMSON. Adaptive Background Mixture Models for Real-Time Tracking. In Computer Vision and Pattern Recognition, vol. 2. pp. 246-253, June 1999	
	-	M.H.YANG, D.J.KRIEGMAN, & N.AHUJA, "Detecting Faces in Images: A Survey," IEEE Trans. Pattern Analysis and Machine Intelligence, vol. 24, no. 1, Jan. 2002	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.